



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,763	03/06/2002	Markus Holze	52240	7165
26474	7590	06/10/2004		
KEIL & WEINKAUF 1350 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			EXAMINER MEDINA SANABRIA, MARIBEL	
			ART UNIT 1754	PAPER NUMBER

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/090,763

Applicant(s)

HOLZLE ET AL.

Examiner

Maribel Medina

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Claim Rejections - 35 USC § 103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,928,985 (Williams) in view of US Patent No. 6,051,163 (Kumberger et al)

In regards to claims 1, 2, 3, and 4, Williams discloses a process for the preparation of a passivated copper and zinc oxide and/or alumina by: (1) precipitating a mixture of catalyst precursors components such as a copper salt with sodium carbonate (instantly claimed anion-containing precipitating agent) with other ingredients precursors (i.e. zinc oxide and alumina) forming a precursor thereof; (2) calcining the precursor formed in step (1); and shaping into pellets, reducing and passivating the catalyst thereof (See col. 1, lines 1-15 and col. 2, lines 42-65).

Williams fails to disclose the limitation of claim 1 step (1) that reads “washing and drying to form a solid catalyst precursor in the form of powder and granules”.

Art Unit: 1754

Kumberger et al is relied upon to teach a method for making a copper, alumina and zinc oxide catalyst wherein after precipitation of the precursors the catalyst is washed and dried and formed into powder or granules (See col. 4, lines 19-37, and the claims).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have washed, dried and formed into a powder or granules the catalyst of Williams since these are common steps performed in catalyst preparation methods as taught by Kumberger et al.

Williams discloses the calcination of the catalyst precursor but fails to disclose the limitation of claim 1 step (2) that reads "to an anion content from the precipitating agent of from 0.1 to 2.5% by weight". However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have obtained an anion content in the instantly claimed range in Williams catalyst, since the same calcination step is performed. This range of concentration of the anion (i.e. carbonate) would have been inherently present once the calcination is performed in Williams method.

In regards to claim 5, Kumberger et al claims disclose the instantly claimed limitations. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used any well known method of preparing the catalyst precursor such as the one taught by Kumberger et al in Williams method, since Williams discloses that this catalyst precursor can be obtained by any precipitation route (See col. 2, lines 42-67).

In regards to claim 7, Williams does not disclose using his catalyst for the steam reforming of methanol.

Art Unit: 1754

Kumberger et al is relied upon to teach the use of copper, zinc oxide and alumina containing catalyst for the steam reforming of methanol at pressure in the range from 1 to 25 bar and temperatures in the range from 180-400°C. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the catalyst disclosed by Williams in the steam reforming method of Kumberger et al since this is a common an known use for catalyst of the instantly claimed composition as taught by Kumberger et al.

In regards to claim 9, Williams disclose that the volume shrinkage of the catalyst is reduced by his method (See col. 4, lines 31-45).

4. Claims 1-9 are rejected under 35 U.S.C. 102(f) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Application Number 20020193248 (Coping application SN 10/090,762). Applicant did not invent the claimed subject matter. The coping application recite the instantly claimed invention.

SN 10,090,762 fail to recite the limitation that reads "to an anion content from the precipitating agent of from 0.1 to 2.5% by weight" however the property would have been inherently provided by the claims of the coping application, once the calcinations step is carried out in the method of making the catalyst.

### **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

Art Unit: 1754

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-7 and 9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/090,762. Although the conflicting claims are not identical, they are not patentably distinct from each other. The only difference between the instant claims and the claims of SN 10,090,762 is that the claims of the copending application does not recite the limitation that reads "to an anion content from the precipitating agent of from 0.1 to 2.5% by weight" however the property would have been inherently provided by the claims of the copending application, once the calcinations step is carried out in the method of making the catalyst.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### **Response to Arguments**

7. Applicant's arguments filed on 3/25/04 have been fully considered but they are not persuasive.

Applicants' argue that a catalyst with an anion content from 0.1 to 2.5 % by weight on Williams' catalyst is not obvious (See page 3 of applicants arguments) this argument is not persuasive, since the anion content as instantly claimed would have been inherently provided once the calcination step is carried in Williams' process.

Art Unit: 1754

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "that a relationship exists between volume shrinkage and hardness of the catalyst after removal of the anions and the content of the anions (See page 4 of arguments)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In regards to the Provisional obviousness-type Double Patenting Rejection, applicants' argue that copending application 10/090,762 is not commonly owned (See page 2). This argument is not persuasive since the copending applications do not have to be commonly owned to be rejected under the non-statutory obviousness-type Double Patenting (See MPEP 804)

Applicants' further argue that the claims of copending application 10/090,763 recite the following order of steps, reducing, passivating and then shaping the calcined catalyst. However this argument is not persuasive, since claim 1 of the instant application recite that the steps of shaping, reducing and passivating can be carried out in any order (See claim 1, step 3) and since claim 2 of the copending application, recite the instantly claimed steps.

Art Unit: 1754

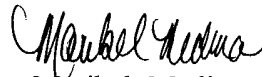
**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maribel Medina whose telephone number is (571) 272-1355.

The examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.



Maribel Medina  
Examiner  
Art Unit 1754